

Waste Sampling

WASTE STREAM IDENTIFICATION AND CHARACTERIZATION

Background

All oil-impacted materials generated as part of the MC 252 Oil Spill Incident response efforts are being tested for waste characteristics that would be used by receiving facilities to verify the materials meet facility-specific acceptance criteria, and to complete facility-specific waste profiles. Sampling and analysis also provided additional information to response workers and the public regarding the chemical and physical properties of materials that were generated and managed during the response and that required transportation and disposal.

Samples of off-shore weathered oil, oily vegetation and other oily solids from spill response activities have been collected and characterized. To date, analytical results have confirmed these materials do not exhibit hazardous waste characteristics. Also, federal and state regulations exempt most of these materials from the definition of hazardous waste due to the exploration and production exemption (see 40 CFR 261.4(b)(5)). In addition, the two chemical markers associated with the dispersant used offshore (propylene glycol, 2-butoxy ethanol) were not detected. Therefore, the sampling activities described in this plan will be used for management purposes only.

Identification and Classification of Waste Streams

The general waste streams that are anticipated from oil spill cleanup activities are described in Table I. The actual volume of each reclaimable/recyclable material, recovered oil or cleanup waste type that may be generated is unknown and is dependent on the extent of oil spill impact areas, duration of the event, and containment and collection/cleanup operations. All waste streams shall be characterized in accordance with all requirements of the facilities selected for recycling (primarily oil) or waste disposal, as defined in the permit requirements for each facility, and as specified by applicable federal and state regulations.

The preferred method of managing the oil-impacted materials collected as part of the spill response is through recycling, or reuse. Oil-impacted materials that can be recycled are not required to be sampled for waste characteristics. For waste characterization purposes, the liquids included in Table I are only those liquids that are not recycled, reused, or reclaimed.

Table I: Potential Waste Streams

Matrix		Sampling Frequency	Analysis	Handling	Disposal
Solid	Oil-impacted material that may include debris, soil, sand, vegetation; solid weathered oil (e.g., tar balls); PPE; disposal equipment; sorbents; etc. Material shall be drained of recoverable oil, as practicable (oil shall be collected for potential re-processing or other use).	Once per week	TCLP SW846 1311/ VOCs by SW846 8260C TCLP SW846 1311/ SVOCs by SW846 827070D TCLP SW846 1311/ Metals by SW846 6010C & SW846 7471A Paint Filter Test SW846 Method 9095	Appropriate containers (i.e., lined or sealed) transported by approved waste hauler	Approved disposal facility
	Non-oily solids that may include municipal waste material that has been recovered from support operations of the cleanup activities, including trash and garbage.	None required	None	Containers transported by approved waste hauler	Approved disposal facility
Liquid	Water, oil and emulsion collected during skimming operations, by vacuum truck from decontamination facilities, management of storm water at land-based decontamination sites, etc. This category also includes excess decontamination water that accumulates during the closed loop decontamination process.	As needed basis based on final disposition of liquid	TCLP SW846 1311/ VOCs by SW846 8260C TCLP SW846 1311/ SVOCs by SW846 827070D TCLP SW846 1311/ Metals by SW846 6010C & SW846 7471A Ignitability by SW846 Chapter 7	Appropriate containers (i.e. vac truck) transported by approved waste hauler Storage in frac tanks at staging areas prior to transport Barge transportation and storage	Approved recovery/disposal facility

Note: Disposal Facilities are listed in the Waste Management Plan

At a minimum, any new waste stream shall be sampled and analyzed for the parameters in Table I in order to characterize and profile the material. Additional laboratory analyses for chemical and physical properties shall be performed on specific waste streams, depending on the source of generation, treatment and disposal facility requirements, and use of the data for treatability studies or for testing alternative recovery and reuse technologies.

On-going sampling of the waste materials shall be conducted for quality control of materials entering the disposal facilities. For active waste streams, samples shall be collected at each active staging area on a State-by-State basis. Samples shall be taken at newly created staging areas as they are established. For solid wastes, sampling shall occur on a weekly basis.

After six weeks of sampling the waste, BP shall review the results of the testing. If the test results are consistently indicating the waste as non hazardous, BP will propose a revised schedule and sampling plan to analyze for TCLP constituents consistent with those found in the spill-related wastes.

If the weekly sampling results identify a discrepancy in the current profile, work shall be undertaken to understand the anomaly. This sampling strategy shall ensure that transportation of wastes does not stop, and therefore, that waste can be collected, staged and shipped to the disposal facilities in a timely manner.

Within the first seven days of plan approval quality control sampling of active waste streams shall be initiated. Each staging area will establish a weekly sampling schedule that will facilitate efficient use of sample team resources. Sample teams will attempt to gather at least one sample from roll-off container, frac tank and barge as available. All waste streams may not be available at all staging areas when sample teams are scheduled to be on-site. In such cases, samples of the available wastes will be collected and the sample teams will attempt to obtain samples the following week. Expeditionary movement of waste and liquids is a priority activity for the spill response. Consistent with this priority, waste shipments should not be delayed to facilitate sampling activities.

EPA will split samples with BP during the Agency's bi-weekly sampling events at the staging areas selected by EPA. Such sampling will satisfy BP's sampling obligations at that staging area for that week.

The procedure for actual collection of samples is presented in the attached Waste Quality Assurance Project Plan (QAPP). Sampling results shall be posted to BP's public website.